

**We Claim:**

1. A method for invoking a web service from a service provider, the method comprising the steps of:
  - 5       invoking an intermediary framework when a service is requested by a requestor;  
      adapting said framework to a tModel supported by a matching service provider;  
      and  
      invoking the service.
- 10   2. The method of claim 1, wherein said step of adapting is performed by runtime weaving of mapping aspects into said framework.
3. The method of claim 2, wherein said step of adapting includes searching an aspect library for a binding protocol that matches the tModel of the requested service and  
15   assigning attributes of the matching protocol for invocation of the service.
4. The method of claim 1 comprising the further steps of:  
      receiving a response from said service provider;  
      converting said response to the tModel supported by said requestor; and  
20   passing said response to said requestor.
5. A method for invoking a web service between a service requestor having a source tModel and a service provider having a target tModel, including a service intermediary converting between said source tModel and target tModel for service  
25   invocation and reply by applying a matching runtime binding template.
6. A method for invoking a web service between a service requestor and a service provider, the method comprising the steps of:  
      a service requestor making a service request to a service intermediary that  
30   includes source tModel and target web service information; and  
      a service intermediary:

retrieving a mapping aspect corresponding to said target web service information;  
retrieving an access code structure;  
performing runtime weaving of said mapping aspect into said access  
5 code structure; and  
invoking the requested service in a form including the target tModel.

7. The method of claim 6, further comprising the steps of: a service provider responding to said invocation by providing a response, and said service intermediary  
10 performing reverse runtime weaving using a mapping aspect corresponding to said source tModel, and returning said response to said service requestor.

8. The method of claim 6, further comprising the step of said service intermediary also weaving an aspect relating to Service Level Agreement parameters into said access  
15 code structure.

9. The method of claim 6, wherein said mapping aspect includes pointcuts and corresponding advice relating to join points of said access code structure.

20 10. A web serving system comprising:  
at least one service requesting client, each said requesting client having a source tModel and specifying target web service information;  
a web service intermediary including an aspect library having a set of mapping aspects each relating to services provided by servers, an access client component, and a  
25 runtime weaving tool;  
a plurality of servers providing web services; and  
a communications network connecting said requesting clients with said intermediary, and said intermediary with said servers;  
and wherein said aspect library matches the target web service information with  
30 one said web service servers and provides a matching target tModel mapping aspect to said access client, to be woven into an aspect of said access client and instantiated in a binding template at runtime by said weaving tool to invoke the requested service.

11. The system of claim 10, further comprising an aspect factory containing templates relating to Service Level Agreement parameters, and wherein said aspect factory outputs an aspect corresponding to a set of SLA parameters specified by a service requesting client to said access client also to be woven with said mapping aspect and said access client aspect.

12. The web serving system of claim 10, wherein said mapping aspect includes pointcuts and corresponding advices relating to join points of said access client aspect.

13. A web service intermediary comprising:  
an aspect library having a set of mapping aspects each relating to services provided by servers;  
an access client component; and  
a runtime weaving tool;  
and wherein said aspect library matches target web service information with one said web service server and provides a matching target tModel mapping aspect to said access client, to be woven into an aspect of said access client and instantiated in a binding template at runtime by said weaving tool to invoke the requested service.

14. The web service intermediary of claim 13, further comprising an aspect factory containing templates relating to Service Level Agreement parameters, and wherein said aspect factory outputs an aspect corresponding to a set of SLA parameters specified by a service requesting client to said access client also to be woven with said mapping aspect and said access client aspect.

15. The web service intermediary of claim 13, wherein said mapping aspect includes point cuts and corresponding advices relating to join points of said access client aspect.

16. A computer program product for invoking a web service, comprising a computer program stored on a storage medium, the computer program including:

code means for discovering a tModel of a web service requestor, and for discovering details of a requested web service;

code means for invoking an intermediary framework when a web service is requested by a requestor;

5 code means for discovering tModels of web service providers and details of web services provided by said providers;

code means for adapting said framework at runtime to the tModel supported by a service provider matching a requested web service; and

code means for invoking the service.

10

17. The computer program product of claim 16, the program of which further including code means for converting a response received from a service provider to the tModel supported by said requestor.